

# SYSTEM CONFIGURATION TEAM MEETING NOTES

February 17, 2005  
NOAA Fisheries Offices  
Portland, OR

## ***1. Greetings and Introductions.***

The February 17, 2005 meeting of the System Configuration Team was chaired by Bill Hevlin, who welcomed everyone to the meeting, led a review of the agenda and a round of introductions. The following is a summary (not a verbatim transcript) of the items discussed and decisions made at this meeting. Anyone with questions about these minutes should contact Kathy Ceballos at 503/230-5420.

## ***2. Progress Update on Chief Joseph Flow Deflectors Installation.***

Bill Garrott of the Corps Seattle District distributed a P2 schedule for the deflector installation project, as well as a general information sheet. You're probably wondering why we're not underway already, he said; the reason is that there have been a lot of challenges to solve regarding plans and specs, the right bank armoring work, and ongoing modeling work. Dam safety issues have also been a concern. The report and the design have been approved, and the WES modeling is now complete, but we're still working on our approvals for the project. We have bids and are ready to make awards by early June. The 90% design has been reviewed, and contract advertisement should take place later this month. Basically, Garrott said, we want to be sure there are no adverse effects.

We're looking at two and a half to three years of construction, said Garrott; we'll be setting up for construction this summer, and construction should start in September. The in-water work window is year-'round, he added. Garrott noted that the current design thinking is that a lower elevation provides the best gas abatement performance. The goal is to complete the first three deflectors by January 2006, and the first six in time for use during the spring 2006 runoff period. Again, the challenge is to balance the need for dam safety against the need for performance next year. In response to a question, Garrott said a total of \$7 million in funding was received for this project in FY'05, which was reduced to \$6.2 million by savings and slippage. It appears that only \$3.7 million of that total will be spent in FY'05. The President's budget requests \$8 million for the Chief Joseph flow deflector project in FY'06.

In response to a question from Russ Kiefer, Garrott said the modeling work indicates that the flow deflectors will produce a significant decrease in TDG production at Chief Joseph, but he did not offer any specific numbers at today's meeting. In response to a request from Kiefer, the

Corps said it should be possible to provide some estimates of the gas reduction resulting from this project. It was noted that funding for the project is separate from CRFM, under the Columbia River Recovery program umbrella.

The group devoted a few minutes of discussion to the expected benefits of this project. Ultimately, it was agreed that it may be appropriate to schedule an SCT field trip to Chief Joseph once construction is underway. It was also suggested that it may be appropriate to schedule a briefing on this topic at the next Water Quality Team and Transboundary Gas Group meetings.

### ***3. Update on Full-Flow Bypass PIT Detection at B2.***

Kim Fodrea said that, at a recent CBFWA meeting, they were scrutinizing some of the costs under the BPA-funded program. There is a requirement that there be someone on the separator at B2 at all times to keep kelts from gilling themselves. The reason that is running all the time is that we need the PIT detection; if we had a full-flow PIT detection, it wouldn't be necessary to fund the full-time person on the separator, at a cost of about \$60,000 per year. There appears to be a little extra money available this fiscal year, Fodrea said; the full-flow bypass would be a relatively cheap and simple project, and I'd like the SCT to consider funding it in FY'05.

It was agreed to place this line-item on the spreadsheet, although Fodrea said she does not yet have a cost estimate for this project. Would this be a two-year project, with design one year and construction the next? David Wills asked. Actually, I think it should be possible to design the project this summer, and construct it after the fish passage season this fall, Fodrea replied, adding that the BPA would fund the electronics, while CRFM would be asked to fund the design and construction.

After a brief discussion, it was reiterated that the B2 full-flow bypass PIT detection project will become an FY'05 CRFM line-item, and that BPA and the Corps will develop a cost estimate and schedule as soon as possible. The SCT will then discuss whether there are FY'05 funds available, and the relative priority of this project compared to the other add-ons, Hevlin said.

### ***4. FFDRWG Update.***

Mike Langsley said that, at the most recent Portland District FFDRWG meeting, a number of specific topics were discussed:

- The Dalles Bay 6 vortex – testing of a potential vortex suppression device will be conducted on the morning of February 22; all SCT members are invited to attend.
- Adult studies – there was agreement that adult performance standards should be measured using PIT detection data; a monitoring plan will be developed through the hydro RM&E group.
- Bonneville FPE and survival studies – a study is being developed to look at subyearling chinook survival and tailrace egress from the B2 corner collector this summer; the SCT will be provided with a cost estimate for this work

- Bonneville spill rating curve – the Corps has drafted a document that provides a correction factor for gate openings at Bonneville; this memo should be available by the end of February
- The Dalles stilling basin – the group discussed erosion concerns in Bay 6; Langeslay will discuss reducing major flow fluctuations at The Dalles with BPA
- The Dalles BGS – modeling and design work are ongoing; the hope is to make a decision on a 2006 prototype by July
- The Dalles decision framework – a working meeting to discuss the 90% document is scheduled for February 22 at The Dalles
- Turbine survival program – FFDRWG supported the idea of additional testing in 2005 to assess the validity of the 2004 results (est. cost: \$500,000)
- Next FFDRWG: March 31

Marvin Shuttters described some of the topics discussed at the most recent Walla Walla District FFDRWG meeting:

- Major system improvement – discussed the process for this work, the production of the report on this process
- McNary surface bypass – a brainstorming workshop will be held in late April to develop potential design alternatives and approaches
- Ice Harbor RSW construction schedule – on track, with the device scheduled to be operational by mid-March
- Flow deflector injury tests – discussed the possibility that deflector elevation relative to tailwater elevation could be a factor in fish injuries; BPA has indicated a possible willingness to provide spill at Ice Harbor outside the normal spill season to conduct this evaluation, which will look at skimming vs. undular or plunging flow
- PIT-tag detection for a lamprey study at Ice Harbor and McNary
- Lower Monumental dewatering flume construction – scheduled to begin in March
- Forebay temperature study – may be a hitch in the CFD model performance
- McNary spill gates – a minor issue has come up, but should not impact operations during the spill season. A little more time and funding will be required to resolve this issue.

## ***5. SRWG Update.***

Shuttters said that, at the most recent SRWG meeting (yesterday), the following major topics were discussed:

- Ice Harbor RSW study design – salmon managers clarified their recommendations in memo form; SRWG close to agreement on the summer study design. The Corps is committed to a full spring and summer RSW test at Ice harbor, despite the poor 2005 water supply forecast
- Summer 2005 Lower Granite RSW test design – at today's meeting, the SCT also discussed various potential RSW test designs for Lower Granite; Kiefer suggested that it may be helpful to attempt to duplicate spill conditions at Ice Harbor and at Lower Granite, for at least a portion of the test period. Others warned that the different hydraulic

conditions at the two projects may invalidate such a comparison.

With respect to Portland District SRWG, Langeslay said that, at yesterday's meeting, there was an issue with the Bonneville flow deflectors – whether the seven-foot deflectors performed better than the 14-foot deflectors. Radio telemetry data showed a significant difference between the two. It was agreed to conduct a balloon-tag study this year, but so far, that test has not been budgeted.

#### ***6. Continued Discussion of FY'05 CRFM Program.***

The discussion of the summer 2005 RSW test at Ice Harbor and Lower Granite from the previous agenda item spilled over into this one. In response to a question, Hevlin said the Lower Granite modeling at WES earlier this month showed that under low river flow conditions (30 to 40 kcfs) spilling 12 kcfs, a total volume for both the RSW treatment and normal deep spill “bulk” treatment, would provide boundary and guidance flow conditions for egress from the immediate tailrace for the summer RSW spill test. The goal would be to look at whether the RSW, or bulk spill, passes more subyearling chinook. Kiefer described Idaho's proposal, which included a somewhat higher volume of spill (19 Kcfs plus bulk standard training spill through the RSW, vs. bulk standard spill) at Ice Harbor. At Lower Granite, Idaho has proposed testing 19 Kcfs in bulk standard spill vs. 12 Kcfs plus bulk standard training spill through the RSW. The group devoted a few minutes of discussion to the question of optimal spill volumes for the summer RSW tests at the two Snake River projects; Hevlin noted that, in work at WES with the Ice Harbor model, under lower river flow conditions (55 kcfs) egress conditions appeared okay down to a minimum of 19 Kcfs spill. For the RSW treatment, Hevlin is recommending spilling 35% of total river flow over the range of spring flows, with 19 Kcfs spill as a minimum.

Shutters said he will take the information from today's discussion to Tim Wick and Dave Hurson, and that the Corps will firm up the 2005 summer RSW study design as soon as possible. Wills said he is comfortable with what Hevlin has proposed for Lower Granite. Fodrea noted that there is some urgency to this process, because Bonneville has been asked to make a decision on the 2005 test at Lower Granite by March 3. Fodrea added that, in her view, it may make sense to conduct an RSW-only test in 2005, in order to test the hypothesis that fish need good egress conditions to exit the tailrace. Maybe good egress conditions aren't really necessary, she said – the hypothesis hasn't been tested.

Ultimately, Shutters said the Corps will develop a couple of test options for Ice Harbor and Lower Granite in 2005, and will distribute them to the SCT and others for comment.

Moving on to the question of RSW installation schedules for Little Goose vs. McNary, Hevlin reminded the group that this issue was discussed at the last SCT meeting; the Corps proposed to move out on Little Goose and McNary on parallel tracks, but didn't have final approval for that strategy. John Kranda said that, since the January 20 SCT meeting, Corps managers have given their approval for this approach, which would put Little Goose on track for RSW installation by 2008 if that is the path chosen by the region. A total of \$575,000 in funding has been restored to the FY'05 Little Goose RSW line-item, to be used primarily for modeling

and design work. Again, the Lower Monumental RSW will be installed by 2007, Kranda said.

Randy Chong said that, while the concurrent path for Little Goose and McNary RSW development has been approved by the district managers, unless unlimited funding and contractor capacity are available, it will be necessary to make a decision as to which project – Little Goose or McNary – should be the next RSW priority after Lower Monumental. There is more uncertainty about the McNary schedule, because of the size of the river and the configuration of the project, but basically, a yes-or-no decision would need to be made on Little Goose by late August 2006, and on McNary by the end of October 2006.

The group discussed information needs at McNary and Little Goose; at the latter project, primarily forebay fish distribution and approach data. If there is no spill at Little Goose, will that set back the schedule? Ron Boyce asked. That's a decision we'll have to make as we go through the season, Chong replied.

Wills thanked the Corps for their willingness to proceed on a concurrent path with Little Goose and McNary design and modeling work. We'll hold a good thought, and hope that the funding is available to do them both, he said. Kiefer said Idaho remains concerned about the fact that, in all likelihood, it will come down to a decision between McNary first or Little Goose first. We're still not happy with how this has worked out, and would prefer to stick to the schedule we originally agreed to – Lower Snake projects first, then McNary, said Kiefer.

Ron Boyce also thanked the Corps for their willingness to work with the SCT on the parallel tracks issue; he asked that the Corps, in their response to the salmon managers' letter on this issue, to clearly explain the need they see for biological testing at Little Goose ahead of any decision on RSW construction at that project. Again, the biological information we feel is important is how fish are entering the Little Goose forebay and where they're passing the project, said Shuttles – we feel that is crucial to helping us decide where to place the RSW. In that case, similar information from the summer on subyearling passage would also be useful, Boyce observed. In response to another question, Shuttles said the Corps is still considering at least an abbreviated spring RSW study at Lower Granite in 2005, despite the poor water year.

Kranda distributed the most recent version of the FY'05 CRFM worksheet; he said he will produce an updated version of the multi-year CRFM spreadsheet prior to the March SCT meeting. Kranda added that there are at least a half-dozen add-ons that have been proposed for FY'05, some with fairly large budgets – turbine pressure test with sensor fish, high-flow PIT at the B2 bypass flume etc. – that the SCT needs to discuss soon. Kiefer noted that IDFG would also like to see consideration of a study that would pull scales from unmarked spring/summer chinook at Lower Granite to provide information about escapement above that project. We will check with NOAA about their plans in this area, said Kiefer, noting that this study would be relatively inexpensive – no tags would be necessary.

After a brief discussion, it was agreed to schedule an SCT conference call to discuss these "extra" items, once the Corps has put together a final list with cost estimates.

### ***7. FY'06 CRFM Program – Preliminary Considerations.***

Kranda reiterated that he will provide an updated multi-year CRFM spreadsheet in time for discussion at the March SCT meeting; he noted that the Corps' FY'06 CRFM request is \$90 million. Hevlin asked the other SCT participants to consider, first, how the process for determining priorities should be conducted this time around.

### ***8. Implementation Plan.***

Fodrea said she had been asked to give the SCT a briefing on this topic; she noted that the action agencies are working on an implementation plan covering the period 2005-2007. This will be followed by another three-year plan covering the 2008-2010 period. We will still produce annual progress reports, noted Eric Braun. For the 2005-'07 plan, a draft will be available for regional review, via internet, by next week, Fodrea added; the deadline for comments will then be three or four weeks later. Fodrea said the action agencies will provide more detailed briefings on the implementation plan at the March IT meeting. Essentially, the plan follows the updated proposed action, but goes into a bit more detail, said Braun. The hope is to finalize the Implementation Plan by late March, before the start of the fish passage season.

### ***9. Next SCT Meeting Date.***

The next meeting of the System Configuration Team was set for Thursday, March 17. Meeting summary prepared by Jeff Kuechle.